

REMARKS

Applicants have amended herein in this Amendment A claims 1, 8, 24, and 40, have cancelled claim 10, and have added claim 42. After entry of this Amendment A, claims 1-9 and 11-42 will be pending. No new matter has been added by these amendments.

Support for the claim amendments is as follows: Claim 1 paragraphs 12, 17-18, 21-22, and 24 and originals claim 1, 10, and 24; claim 8 paragraphs 17-19; claim 24 paragraphs 22-23; claim 40 paragraphs 15 and 29-32 and original claim 24; and claim 42 paragraphs 12, 17-19, 21-22, and 24 and original claims 1, 8, and 24.

Applicants respectfully request reconsideration and allowance of all pending claims.

1. Rejection of Claims 1-9, 13, 20, 24-25, and 27-32 Under 35 U.S.C. §102(b)

Reconsideration is requested of the rejection of claims 1-9, 13, 20, 24-25, and 27-32 under 35 U.S.C. §102(b) as being anticipated by Scholz, et al. (U.S. 5,139,955).

Claim 1, as amended herein, is directed to a one component Karl Fischer reagent comprising iodine, imidazole, and a substituted imidazole. The molar ratio of imidazole to substituted imidazole in claim 1 is from about 0.3:2 to about 2:0.3. The reagent in claim 1 is suitable for use as a one component reagent in volumetric Karl Fischer titrations.

Scholz, et al. disclose Karl Fischer reagents solely for use in multicomponent coulometric Karl Fischer titrations. Scholz's reagents comprise an alcoholic solvent with a reactive base mixed with sulfur dioxide and an iodide conducting salt. The reactive base may contain imidazole and/or imidazole derivatives and/or diethanolamine and/or triethanolamine. As noted in column 3 lines 55-56 of the reference, each reagent contains an iodide or a mixture of different iodides. Scholz fails to disclose any

teaching or examples related to the ratio of amounts of imidazole to imidazole derivative suitable for use in the coulometric reagents.

Significantly, Scholz fails to disclose a number of requirements of amended claim 1 including: (1) a reagent suitable for use in a one component Karl Fischer volumetric titration; (2) a reagent comprising iodine; and (3) a reagent having a molar ratio of imidazole to substituted imidazole of from about 0.3:2 to about 2:0.3.

Regarding the first shortcoming of the reference, it is clear that the reference is solely directed to reagents suitable for use in coulometric Karl Fischer titrations as compared to volumetric titrations, and specifically one component volumetric Karl Fischer titrations as required by claim 1. The reference fails to even discuss or mention volumetric-type titrations and instead focuses specifically on coulometric-type titrations. As noted in applicant's specification in a number of areas, volumetric and coulometric titrations are materially different, and utilize different components. Additionally, coulometric titrations utilize electric current whereas volumetric titrations do not. As discussed in more detail below and in applicant's specification, a Karl Fischer reagent suitable for one type of titration is not necessarily suitable for use in another.

Regarding the second shortcoming of the reference, Scholz fails to disclose any reagent that utilizes iodine, as required by claim 1 and all volumetric reagents for Karl Fischer titrations. As discussed in applicant's specification, volumetric titrations utilize iodine and coulometric titrations utilize iodide. As noted above, Scholz specifically states that the reagents according to his invention all contain iodide or a mixture of different iodides. Although in one embodiment iodine is used with water, it is used to specifically react with water to form iodide in the final reagent. Because the reference is

directed solely to coulometric titrations, iodine is not used as such in the final reagent.

Finally, regarding the third shortcoming of the reference, Scholz fails to disclose any amounts for the ratios of imidazole to substituted imidazole suitable for use in his coulometric reagents. Additionally, and importantly, none of the seven Examples set forth in the reference teach or disclose the combination of an imidazole and an imidazole derivative in any amount, let alone the amount required by claim 1.

As stated in M.P.E.P. §2131, a claim is anticipated under 35 U.S.C. §102 only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. As stated above, Scholz, et al. fail to disclose a one component Karl Fischer reagent comprising iodine, imidazole, and a substituted imidazole wherein the molar ratio of imidazole to substituted imidazole is from about 0.3:2 to about 2:0.3 wherein the reagent is suitable for use in volumetric titrations. As such, claim 1 is not anticipated and is patentable over the Scholz, et al. reference.

Claims 2-9, 13, 20, 24-25, and 27-32 depend directly or indirectly on claim 1. As such, claims 2-9, 13, 20, 24-25, and 27-32 are patentable for the same reasons as claim 1 as stated above, as well as for the additional elements they require.

2. Rejection of Claims 10-12, 22-23, 26, 33, and 36-39  
Under 35 U.S.C. §103(a)

Reconsideration is requested of the rejection of claims 11-12, 22-23, 26, 33, and 36-39 under 35 U.S.C. §103(a) as being unpatentable over Scholz, et al. (U.S. 5,139,955). Claim 10 has been canceled, and as such, the rejection to claim 10 should be withdrawn as moot. Claims 11-12, 22-23, 26, 33, and 36-39 depend either directly or indirectly from claim 1 and are patentable for

the same reasons as claim 1 set forth above, as well as for the additional elements they require.

Although the rejected claims (with the exception of claim 10 which has now been cancelled) are patentable for the reasons set forth above, applicant's will briefly address the obviousness rejection set forth by the Office. Specifically, the Office notes that although Scholz does not specifically disclose the ratio of the reagent components as recited in applicant's claims, it would have been obvious for anyone of ordinary skill in the art to optimize these ratios to obtain the best results for the reagent. With regards to the ratios of imidazole to substituted imidazole set forth in the instant claims, applicants note that the cited reference, which not only fails to disclose any teaching with regard to volumetric Karl Fischer titrations, also fails to disclose the ratios of imidazole to substituted imidazole as required by applicants claims, and fails to disclose any ratios of these components whatsoever. As such, there is simply nothing to optimize by one skilled in the art as these ratios are not even discussed or taught. Regardless, as noted above, all of the rejected claims depend either directly or indirectly from claim 1 and are therefore patentable for the same reasons as claim 1 set forth above.

3. Rejection of Claims 14-19, 21 and 40 Under 35 U.S.C. §103(a)

Reconsideration is requested of the rejection of claims 14-19, 21, and 40 under 35 U.S.C. §103(a) as being unpatentable over Scholz, et al. (U.S. 5,139,955) in view of Fischer, et al. (U.S. 4,851,352). Claims 14-19 and 21 depend directly from claim 1 and are patentable for the same reasons as claim 1, as well as for the additional elements they require. Claim 40 is an independent claim and is similar to claim 1 and is also patentable for the

same reasons as claim 1 set forth above, as well as for the additional elements it requires.

4. Rejection of Claims 34-35 Under 35 U.S.C. §103(a)

Reconsideration is requested of the rejection of claims 34-35 under 35 U.S.C. §103(a) as being unpatentable over Scholz, et al. (U.S. 5,139,955) in view of Sherman, et al. (Accreditation and Quality Assurance, May 1999). Claims 34 and 35 indirectly depend from claim 1 and are patentable for the same reasons as claim 1 set forth above, as well as for the additional elements they require.

5. Rejection of Claim 41 Under 35 U.S.C. §103(a)

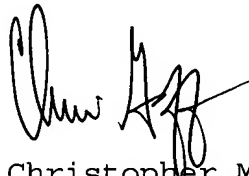
Reconsideration is requested of the rejection of claim 41 under 35 U.S.C. §103(a) as being unpatentable over Scholz, et al. (U.S. 5,139,955) in view of Fischer, et al. (U.S. 4,851,352) and further in view of Sherman, et al. (Accreditation and Quality Assurance, May 1999). Claim 41 depends from claim 40 and is patentable for the same reasons as claim 40 set forth above, as well as for the additional elements it requires.

CONCLUSION

In view of the above, applicants respectfully request favorable reconsideration and allowance of all pending claims.

Enclosed is a check in the amount of \$430.00 in payment of a two-month extension fee. The Commissioner is hereby authorized to charge any fee deficiency or credit any overpayment in connection with this Amendment A to Deposit Account Number 19-1345 in the name of Senniger, Powers, Leavitt & Roedel.

Respectfully Submitted,



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